What is claimed is:

1   1.   A method of producing a background image representing data comprising

2   the steps of:

3   producing a first encoding of the data into a first binary array;

4   producing a second encoding of the data into a second binary array;

5   representing the first binary array as a first set of modules of a first size on

6   nodes of a first lattice;

7   representing the second binary array as a second set of modules of a

8   second size, which is smaller than the first size on nodes of a second lattice;

9   combining the first and second sets of modules; and

10   printing the first and second sets of modules.

1   2.   The method claimed in claim 1, further including the step of:

2   superimposing graphic material on the modules before printing.

1   3.   The method claimed in claim 2, wherein the graphic material is a postal

2   indicia.

1   4.   The method claimed in claim 1, wherein the modules on the first lattice

2   and the modules on the second lattice do not overlap.

1   5.   A method for producing a composite image comprising the steps of:

2   producing a first image and a second image that embeds information in

3   the first image;

4   representing information contained in the second image by a two-

5   dimensional bar code;

6   filtering the two-dimensional bar code with a spreading algorithm that

7   scrambles the information represented by the two-dimensional bar code;

8   splitting the filter bar code into an equal first part and an equal second

9   part, wherein each first part and each second part will contain an upper portion

10   and a lower portion such that the lower portion of the first part and the upper

11   portion of the second part will be white or empty space;

12   applying a spreading algorithm to the first part and second part to further

13   hide the information in the first and second parts;

14   expanding the first and second parts over the entire image that is going to

15   be printed; and

16   printing the first and second parts over the first image to produce an image

17   containing hidden information.

1   6.   The method claimed in claim 5, wherein the first image is a postal indicia.

1   7.   The method claimed in claim 5, wherein the first and second images are

2   printed on a medium.

1   8.   The method claimed in claim 5, wherein:

2   at each location in which information from the first parts is going to be

3   printed, the printed information will be a printed pixel of a specified dimension,

4   and

5   at each location in which information from the plurality of second parts is

6   going to be printed, the printed information will be a printed pixel of a specified

7   dimension that differs from the pixels printed in the first parts.

1   9.   The method claimed in claim 5, wherein when the first and second images

2   are scanned and printed, the printed pixels of specified dimensions in the first

3   and second parts will become larger.

1   10.   The method claimed in claim 9, wherein the change in size of the printed

2   pixels of specified dimensions in the first and second parts is detectable by the

3   unaided human eye.

1 11. The method claimed in claim 9, wherein the change in size of the printed

2 pixels of specified dimensions in the first and second parts is detectable by a

3 scanner.

1 12. The method claimed in claim 5, further including the steps of:

2 photocopying the first and second images; and

3 noticing a change in appearance of the second image.

1 13. The method claimed in claim 5, further including the steps of:

2 scanning the first and second images; and

3 noticing a change in appearance of the second image.

1 14. The method claimed in claim 5, wherein when the first and second images

2 are photocopied, the printed pixels of specified dimensions in the first and

3 second parts will become larger.

1 15. The method claimed in claim 14, wherein the change in size of the printed

2 pixels of specified dimensions in the first and second parts is detectable by the

3 unaided human eye.

1　16.　The method claimed in claim 14, wherein the change in size of the printed

2　pixels of specified dimensions in the first and second parts is detectable by the

3　scanner.

1　17.　The method claimed in claim 5, wherein the first image will not change in

2　appearance when the first image is scanned or photocopied.